

**System and Method for JIT Memory Footprint
Improvement for Embedded Java Devices**

ABSTRACT

A system and method for reclaiming memory occupied by
5 compiled code resulting from a Just-in-Time (JIT) compiler
is provided. An address space used to store code resulting
from a JIT compiler is memory mapped using a special
filesystem. A map is maintained identify method name and
corresponding JIT pages. When the memory manager needs
10 more space, it requests that the special filesystem write
the data from memory back to nonvolatile storage. The
special filesystem acts as if the data was written. When
the code is subsequently called, a page fault and an
invalid operation exception occur and are handled. The
15 data in the map is used to recompile the method to the same
address space and the faulting instruction is re-executed.